

## ABSTRACT OF THE DISCLOSURE

A frequency divider includes a first divider configured to divide an input signal, and to generate a first high-frequency signal. A second divider is configured to divide a second high-frequency signal, and to generate an output signal. A third  
5 divider is configured to generate a third high-frequency signal. A mixer is configured to execute arithmetic processing for the first and third high-frequency signals, and to generate the second high-frequency signal.